

Work Order ID 135151

Thursday, July 30, 2015 1:39:05 PM

135151

Page 1

Item ID: 646.4001

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: AS350 Cable Cutter System

Stop

NS2

Start Date: 7/30/15

Start Qty: 1.00

1

Cust Item ID:**Required Date:** 8/03/15

Req'd Qty: 1.00

*** 1 ***

Customer:

Reference:

Approvals:

Process Plan:

Date 5-7-30

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):**Date:**

Stop

NR2

[illegible]

AUG 06 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 135151

Thursday, July 30, 2015 1:39:05 PM

135151

Page 2

Item ID: 646.4001

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AS350 Cable Cutter System

Start Date: 7/30/15 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 8/03/15 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00

130

Packaging

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP 646.4001

Location: FG 101DAS
02
9-89

AUG 06 2015

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

SA 20150807

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : ☐							

Picklist Print

Thursday, July 30, 2015 1:39:12 PM

Page 1

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM
IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status DAS
646.3301		Manufactured	No				Each	5.0000		1			27 9-89
646 3301									**	J.A			
Upper Cutter Assy													
DAS													
02													
9-89													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				CCK042				5					
				123396				4					
				124729				1					
646.3001		Manufactured	No				Each	6.0000		1			
646 3001									**	J.A			
Lower Cutter Assy													
DAS													
02													
9-89													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				CCK045				6					
				124733				6					
646.2910		Manufactured	No				Each	9.0000		1			
646 2910									**	J.A			
Deflector													
DAS													
02													
9-89													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				CCK050				9					
				123356				9					
646.3810		Manufactured	No				Each	12.0000		2			
646 3810									**	J.A			
Bracket													
DAS													
02													
9-89													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				cck023a				6					
				131001				6					
				cck104				6					
				132616				6					
				8127867									

JUL 31 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Thursday, July 30, 2015 1:39:12 PM

Page 2

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

646.3510

Manufactured No

Each 12.0000

1

646 3510

Strut

**

J.A

68-6

27

DAS

DAS
02
9-89

Location

Loc Qty

Loc Code

cck101

1

106666

1

cck15a

11

127077

11

646.3511

Manufactured No

Each 9.0000

1

646 3511

Strut

**

J.A

68-6

27

DAS

DAS
02
9-89

Location

Loc Qty

Loc Code

cck102

5

127082

5

cck15a

4

102891

4

647.0112

Manufactured No

Each 189.0000

2

647 0112

Strut Bracket

**

J.A

JUL 31 2015

DAS

27

9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

CCK109

189

112215

20

122245

5

122871

50

123318

22

M130388

92

Thursday, July 30, 2015 1:39:12 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 16.6%;">Skid-tube ☐</td> <td style="width: 16.6%;">Cross tube ☐</td> <td style="width: 16.6%;">Water Jet ☐</td> <td style="width: 16.6%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																												
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																												
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																												
Large Fab ☐	Composite ☐	Supplier ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																								
Description Work Order Deviation				Disposition				Completed By																																																							
								Lead hand / Supervisor Approval Verification																																																							
								QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
OTHER : _____																																																															

***Picklist Print**

Thursday, July 30, 2015 1:39:12 PM

Page 3

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

647.7703

Manufactured No

Each

2.0000

2

647 7703

Strut Assembly

DAS
02
9-89

Location

Loc Qty

Loc Code

CCK112

2

(130284)

2

Each

1,854.000

138

NAS1149F0332P

Purchased No

NAS1149F0332P

Washer

DAS
02
9-89

Location

Loc Qty

Loc Code

GA

222

122063

222

ST260a

1539

m128401

6

m131026

80

m131697

1453

st268

93

123900

7

m130388

86

**

JA

DAS

27

9-89

**

JA

DAS

27

9-89

138

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Thursday, July 30, 2015 1:39:13 PM

Page 4

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

Each

1,340.000

61

MS21042L3

Nut

**

J.A

DAS

27

9-89

DAS
02
9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

FP001

393

M130922

393

GA

315

M131317

315

ST305

632

116549

12

126333

49

M128754

2

M132123

17

M132382

52

M132883

500

42

13

646.3110

Manufactured

No

Each

4.0000

1

646 3110

Channel

**

J.A

DAS
02
9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

cck020

4

126780

2

133124

2

646.3710

Manufactured

No

Each

27.0000

1

646 3710

Doubler

**

J.A

JUL 31 2015

DAS
02
9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

CCK015

27

113729

1

127550

26

DAS

27

9-89

Thursday, July 30, 2015 1:39:13 PM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Thursday, July 30, 2015 1:39:13 PM

Page 5

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

646.3210	Manufactured	No	Each	1.0000	1			
646 3210						**	J.A	DAS
Support								27
DAS 02 9-89								9-89
	<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>				
	cck020		1					
	(126777)		1					
646.3713	Manufactured	No	Each	19.0000	1			
646 3713						**	J.A	DAS
Gusset								27
DAS 02 9-89								9-89
	<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>				
	cck103		19					
	(120631)		19					
MS24694-S51	Purchased	No	Each	202.0000	5			
MS24694-S51						**	J.A	DAS
Screw								27
DAS 02 9-89								9-89
	<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>				
	ST289		202					
	(m130928)		202					
AN3-13A	Purchased	No	Each	63.0000	1			
AN3-13A						**	J.A	DAS
Bolt								27
DAS 02 9-89								9-89
	<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>				
	CA		3					
	m129682		3					
	GA		20					
	m127070		20					
	ST349		40					
	(m131305)		40					

JUL 31 2015

Thursday, July 30, 2015 1:39:13 PM

Shop Packet Print

Page 5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Thursday, July 30, 2015 1:39:13 PM

Page 6

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

AN3-4A Purchased No

Each 194.0000 10

AN3-4A

Bolt

DAS
02
9-89

Location

Loc Qty

Loc Code

CA 110
m129682 110
ST350 84
m132317 84

**

J.A

DAS
27
9-89

CR3213-5-3 Purchased No

Each 132.0000 14

CR3213-5-3 *

Cherry Rivet

DAS
02
9-89

Location

Loc Qty

Loc Code

ST319 132
m127831 30
m130388 2
m132763 100

**

J.A

DAS
27
9-89

MS20470AD5-5.5 Purchased No

Each 223.0000 14 8

MS20470AD5-5 5

Rivet

DAS
02
9-89

Location

Loc Qty

Loc Code

ST310 223
123425 223

**

J.A

DAS
27
9-89

646.3711 Manufactured No

Each 39.0000 1

646 3711

Clip

DAS
02
9-89

Location

Loc Qty

Loc Code

cck103 39
120626 39

**

J.A

JUL 31 2015

DAS
27
9-89

Thursday, July 30, 2015 1:39:13 PM

Shop Packet Print

Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Picklist Print

Thursday, July 30, 2015 1:39:13 PM

Page 7

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

646.3712 Manufactured No

Each 29.0000 1

646 3712

Clip

DAS
02
9-89

**

J.A

DAS
27
\$-89

Location

Loc Qty

Loc Code

cck103

29

101119

1

(20630)

28

Each

26.0000

1

646.3811

Manufactured No

646 3811

Radius Block

DAS
02
9-89

**

J.A

DAS
27
\$-89

Location

Loc Qty

Loc Code

cck104

26

(110717)

11

122938

15

Each

168.0000

2

AN3-6A

Purchased No

AN3-6A

Bolt

DAS
02
9-89

**

J.A

DAS
27
\$-89

Location

Loc Qty

Loc Code

ST338a

100

M131305

100

ST349

68

(M132680)

68

Each

157.0000

1

MS24694-S55

Purchased No

MS24694-S55

Screw

DAS
02
9-89

**

J.A

JUL 31 2015

DAS
27
\$-89

Location

Loc Qty

Loc Code

ST289

157

m127305

3

(m131624)

54

m132803

100

Thursday, July 30, 2015 1:39:14 PM

Shop Packet Print

Page 7

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Thursday, July 30, 2015 1:39:14 PM

Page 8

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

646.3610

Manufactured No

Each

6.0000

1

646 3610

Filler

DAS

02

9-89

**

J.A

DAS

27

\$-59

Location

Loc Qty

Loc Code

cck103

6

(127737)

6

Each

20.0000

1

646.3714

Manufactured No

646 3714

Gusset

DAS

02

9-89

**

J.A

DAS

27

\$-59

Location

Loc Qty

Loc Code

cck103

20

(120632)

20

Each

1,104.000

8

MS20470AD5-6

Purchased No

MS20470AD5-6

RIVET

**

J.A

DAS

27

\$-59

Location

Loc Qty

Loc Code

CCK004

890

124089

890

ST309

214

(105433)

214

Each

12.0000

2

646.3812

Manufactured No

646 3812

Gusset Bracket

DAS

02

9-89

**

J.A

JUL 31 2015

DAS

27

\$-59

Location

Loc Qty

Loc Code

cck023a

6

130858

6

cck104

6

(132425)

6

2

Thursday, July 30, 2015 1:39:14 PM

Shop Packet Print

Page 8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Thursday, July 30, 2015 1:39:14 PM

Page 9

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

AN3-3A

Purchased

No

Each

448.0000

4

AN3-3A

Bolt

**

JA

DAS

27

9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

ST338a

200

m131624

200

ST350

248

m132317

248

4

646.3813

Manufactured

No

Each

18.0000

1

646 3813

Strut Bracket

**

JA

DAS

27

9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

cck104

5

132541

5

CCK23a

13

122968

2

124265

4

127453

4

130946

3

1

MS20470AD5-7

Purchased

No

Each

563.0000

3

MS20470AD5-7

Rivet

**

JA

JUL 31 2015

DAS

27

9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

ST309

563

123425

563

3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐																			

Picklist Print

Thursday, July 30, 2015 1:39:14 PM

Page 10

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

MS21047-3

Purchased

No

Each

128.0000

18

MS21047-3

Nut Plate

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

DAS
27
9-89

ST303

128

m130388

8

m13238

20

m132763

50

m132803

50

18

CCR264SS3-02

Purchased

No

Each

313.0000

36

CCR264SS3-02

Rivet, Cherry

DAS
02
9-89

JA

DAS
27
9-89

Location

Loc Qty

Loc Code

ST321

313

M131803

13

m132317

300

m132123 ✓

Each

246.0000

4 2

AN3-5A

Purchased

No

AN3-5A

Bolt

DAS
02
9-89

JA

DAS
27
9-89

Location

Loc Qty

Loc Code

CA

132

m129682

132

GA

114

m131420

114

2

646.3715

Manufactured

No

Each

10.0000

2

646 3715

Strut Doubler

DAS
02
9-89

JA

JUL 30 2015 DAS
27
9-89

Location

Loc Qty

Loc Code

cck103

10

131050

8

m132668

2

2

Thursday, July 30, 2015 1:39:15 PM

Shop Packet Print

Page 10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

Picklist Print

Thursday, July 30, 2015 1:39:15 PM

Page 11

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-12

Purchased

No

Each

40.0000

6

MS27039-1-12

Screw

DAS
02
9-89

Location

Loc Qty

Loc Code

ST285

40

m128799

2

m131317

38

Each

10.0000

1

646.3716

Manufactured

No

646 3716

Gauge Bracket

DAS
02
9-89

Location

Loc Qty

Loc Code

cck103

10

122908

4

133105

6

Each

138.0000

2

MS20426AD5-7

Purchased

No

MS20426AD5-7

RIVET

DAS
02
9-89

Location

Loc Qty

Loc Code

ST312

138

101340

38

M132767

100

Each

32.0000

2

MS24694-S54

Purchased

No

MS24694-S54

SCREW

DAS
02
9-89

Location

Loc Qty

Loc Code

ST289

32

m130388

6

m132344

26

**

JA

JUL 30 2015

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐								
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval					
Description Work Order Deviation				Disposition				Completed By				
								Lead hand / Supervisor Approval Verification				
												QC / QA Coordinator Approval
Root Cause		FAULT CATEGORY										
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐							
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐							
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐							
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐							
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐							
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐							
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐							
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐							
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐							
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐							
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____										
Misidentified ☐	Past Due ☐											

Picklist Print

Thursday, July 30, 2015 1:39:15 PM

Page 12

Work Order ID: 135151

Parent Item: 646.4001

Parent Item Name: AS350 Cable Cutter System

135151

646 4001

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-21

Purchased

No

Each

448.0000

4

DAS

27

\$-89

MS27039-1-21

Screw

**

J.A

DAS

02

9-89

Location

Loc Qty

Loc Code

ST273A

395

m127904

395

ST284

53

124326

8

m126319

45

4

MS27039-1-20

Purchased

No

Each

228.0000

2

MS27039-1-20

Screw

**

J.A

DAS

02

9-89

Location

Loc Qty

Loc Code

ST284

228

124326

228

2

MS27039-1-19

Purchased

No

Each

241.0000

22

MS27039-1-19

Screw

**

J.A

JUL 30 2015

DAS

27

\$-89

DAS

27

\$-89

DAS

02

9-89

Location

Loc Qty

Loc Code

GA

124

m124326

32

m127904

92

ST273A

-15

m127904

-15

ST284

132

m127904

132

22

Thursday, July 30, 2015 1:39:15 PM

Shop Packet Print

Page 12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Thursday, July 30, 2015 1:39:15 PM

Page 13

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

646.3717

Manufactured No

Each

19.0000

1

646 3717

Doubler

J.A

DAS

27

\$-59

DAS

02

9-89

Location

cck103

Loc Qty

19

Loc Code

120633

19

1

646.3718

Manufactured No

Each

8.0000

2

646 3718

Custom Washer

J.A

DAS

27

\$-59

DAS

02

9-89

Location

cck103

Loc Qty

8

Loc Code

132698

8

2

646.3719

Manufactured No

Each

33.0000

2

646 3719

Doubler

J.A

JUL 30 2015

DAS

27

\$-59

DAS

02

9-89

Location

cck104

Loc Qty

2

Loc Code

123589

2

2

cck126

31

120634

31

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Thursday, July 30, 2015 1:39:15 PM

Page 14

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-10

Purchased

No

Each

655.0000

2

MS27039-1-10

SCREW

JA

DAB

27

9-89

**DAS
02
9-89**

Location

Loc Qty

Loc Code

CA

41

m128635

41

GA

230

m129541

230

ST273A

200

m132677

200

ST285

184

m123522

2

m130358

2

m132640

180

2

AN3-11A

Purchased

No

Each

186.0000

10

AN3-11A

Bolt

JA

DAB

27

9-89

**DAS
02
9-89**

Location

Loc Qty

Loc Code

ST338a

186

m125709

86

m132823

100

10

600.0990

Purchased

No

Each

52.0000

1

600 0990

MAGNABOND 6398 PART A

JA

JUL 30 2015

DAB

27

9-89

**DAS
02
9-89**

Location

Loc Qty

Loc Code

CA2

26

M131589

26

2/11/16

PKG

26

M129818

26

7/16/15

1

Thursday, July 30, 2015 1:39:16 PM

Shop Packet Print

Page 14

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval										
Description Work Order Deviation				Disposition				Completed By									
								Lead hand / Supervisor Approval Verification									
								QC / QA Coordinator Approval									
Root Cause		FAULT CATEGORY															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :									
Misidentified ☐	Past Due ☐																

Picklist Print

Thursday, July 30, 2015 1:39:16 PM

Page 15

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

600.0991	Purchased	No	Each	52.0000	1		
600 0991						** J.A	DAB
MAGNOBOND 6398 PART B							27
							\$-89
DAS		<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>			
02		CA2	27				
9-89		m131589	27	2/11/16			
		PKG	25				
		M129818	25	7/16/15	1		

600.1012	Purchased	No	Each	24.0000	1		
600 1012						** J.A	DAB
Sealant PR1425B2 (#654 sem)							27
							\$-89
DAS		<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>			
02		cck017	20				
9-89		m132805	20				
		cck018	4				
		m129749	2				
		m131364	2	10/30/15	1		

600.0129	Purchased	No	f	320.0000	8		
600 0129						** J.A	DAB
VHB TAPE 75935A651							DAB
							27
							\$-89
DAS		<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>			
02		CCK095	272				
9-89		m131311	272				
		CCK096	48				
		m127920	48		8		

600.1013	Purchased	No	Each	940.0000	5		
600 1013						** J.A JUL 30 2015	DAB
021200-3M TAPE PRIMER 94 PRIMER 24216							27
							\$-89
DAS		<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>			
02		CCK095	940				
9-89		m131145	940	6/15/16	5		

Thursday, July 30, 2015 1:39:16 PM

Shop Packet Print

Page 15

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Thursday, July 30, 2015 1:39:16 PM

Page 16

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

646.3910

Manufactured No

Each

56.0000

4

646.3910

Shim

**DAS
02
9-89**

Location

Loc Qty

Loc Code

cck104

56

(122951)

56

JA

DAS
27
9-89

646.3911

Manufactured No

Each

81.0000

1

646.3911

Shim

**DAS
02
9-89**

Location

Loc Qty

Loc Code

cck023

50

126059

50

cck104

19

(118824)

1

126229

18

k023a

12

123075

12

JA

DAS
27
9-89

646.3912

Manufactured No

Each

89.0000

4

646.3912

Shim

**DAS
02
9-89**

Location

Loc Qty

Loc Code

cck023a

60

123143

50

124501

10

cck104

29

103082

1

(123530)

28

JA

JUL 30 2015

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
☐ Environment	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
☐ Design	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
☐ Doc/Data	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
☐ Equip/Tooling	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
☐ Handling/Pre	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
☐ Material	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
☐ Internal Transport	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
☐ Tribal Knowledge	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
☐ LOA	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
☐ Substation	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
☐ Past Expiry Date	☐ Manufacturing Process	OTHER : _____					
☐ Misidentified	☐ Past Due						

Picklist Print

Thursday, July 30, 2015 1:39:16 PM

Page 17

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

646.3913

Manufactured No

Each

121.0000

1

646 3913

Shim

J.A

DAS

27

9-89

**DAS
02
9-89**

Location

Loc Qty

Loc Code

cck023a

25

124108

25

cck023aq

82

126060

82

cck104

14

100136

2

(26231)

12

AN3-12A

Purchased No

Each

57.0000

2

***AN3-12A* ***

Bolt

**DAS
02
9-89**

J.A

DAS

27

9-89

Location

Loc Qty

Loc Code

CA

57

m129682

57

m129507 ✓

Each

180.0000

2 2

MS27039-1-16

Purchased No

MS27039-1-16

Screw

**DAS
02
9-89**

J.A

DAS

27

9-89

Location

Loc Qty

Loc Code

ST285

180

m130388

4

(m131317)

76

m132344

100

650.9201

Manufactured No

Each

9.0000

2

650 9201

Eyelet Bracket Assembly

**DAS
02
9-89**

J.A

JUL 30 2015

DAS

27

9-89

Location

Loc Qty

Loc Code

cck126

9

(132814)

9

2

Thursday, July 30, 2015 1:39:16 PM

Shop Packet Print

Page 17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			OTHER : ☐	

Picklist Print

Thursday, July 30, 2015 1:39:16 PM

Page 18

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

AN44-5A	Purchased	No	Each	26.0000	2		
AN44-5A						**	J.A
Eyebolt							DAS 27 \$-39

**DAS
02
9-89**

Location

Loc Qty

Loc Code

ST339

26

12424

16

m126193

10

2

AN665-34R	Purchased	No	Each	16.0000	2		
AN665-34R						**	J.A
Clevis							DAS 27 \$-39

**DAS
02
9-89**

Location

Loc Qty

Loc Code

ST330

16

M130388

4

M132317

12

2

AN4C7A	Purchased	No	Each	98.0000	2		
AN4C7A						**	J.A
BOLT							DAS 27 \$-39

**DAS
02
9-89**

Location

Loc Qty

Loc Code

ST345

98

m127363

98

2

NAS1149F0432P	Purchased	No	Each	1,259.000	4		
NAS1149F0432P						**	J.A JUL 30 2015
WASHER							DAS 27 \$-39

**DAS
02
9-89**

Location

Loc Qty

Loc Code

ST260a

1188

M131697

88

M132551

500

M132677

600

st268

71

M128995

63

M130388

8

4

Thursday, July 30, 2015 1:39:17 PM

Shop Packet Print

Page 18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																		
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval																	
Description Work Order Deviation			Disposition																		
			Completed By																		
			Lead hand / Supervisor Approval Verification																		
			QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																
OTHER : ☐																					

Picklist Print

Thursday, July 30, 2015 1:39:17 PM

Page 19

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

MS21042L4

Purchased

No

Each

3,203.000

2

MS21042L 4

Locknut

JA

DAS

27

\$-09

DAS
02
9-89

Location

Loc Qty

Loc Code

FP001

2

m124231

2

GA

142

m127813

142

ST260a

170

m130799

56

m131803

6

m132262

108

ST305

2889

m128300

8

m128798

12

m130388

7

m130922

97

m131618

12

m132123

56

m132382

2697

2

AN316C4R

Purchased

No

Each

39.0000

2

AN316C4R

NUT

JA

JUL 30 2015

DAS

27

\$-09

DAS
02
9-89

Location

Loc Qty

Loc Code

ST331

39

m127584

4

m127618

20

m127838

13

m130388

2

2

Thursday, July 30, 2015 1:39:17 PM

Shop Packet Print

Page 19

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Thursday, July 30, 2015 1:39:17 PM

Page 20

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

MS21042-3

MS21042L3

Purchased

No

Each

563.0000

2

***MS21042-3* ***

Nut / use MS21042L3

J.A

DAS

27

9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

CA

501

M129682

501

ST305

62

6931

2

M128770

10

M129541

15

M130388

35

m132382

Each

427.0000

2

2

J.A

DAS

27

9-89

MS27039-08-13

Purchased

No

MS27039-08-13

Screw

DAS
02
9-89

Location

Loc Qty

Loc Code

ST273A

346

124326

346

ST281

81

123352

8

4067

69

M130388

4

MS21042-08

MS21042L08

Purchased

No

***MS21042-08* ***

USE MS21042L08

DAS
02
9-89

Location

Loc Qty

Loc Code

ST304

25

122815

25

ST306

8

m130388

8

m131697

J.A

JUL 30 2015

DAS

27

9-89

2

Thursday, July 30, 2015 1:39:17 PM

Shop Packet Print

Page 20

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Thursday, July 30, 2015 1:39:17 PM

Page 21

Work Order ID: 135151

135151

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/30/15

Required Date: 8/03/15

Start Qty: 1.00

Required Qty: 1.00

NAS1149FN832P

Purchased

No

Each

2,967.000

4

***NAS1149FN832P* ***

Washer

J A JUL 30 2015

DAS

27

\$-89

DAS
02
9-89



Location

Loc Qty

Loc Code

ST260a

1704

125268

1704

st268

1263

125268

342

M130388

921

m123900



4

DQA: _____ Date: _____



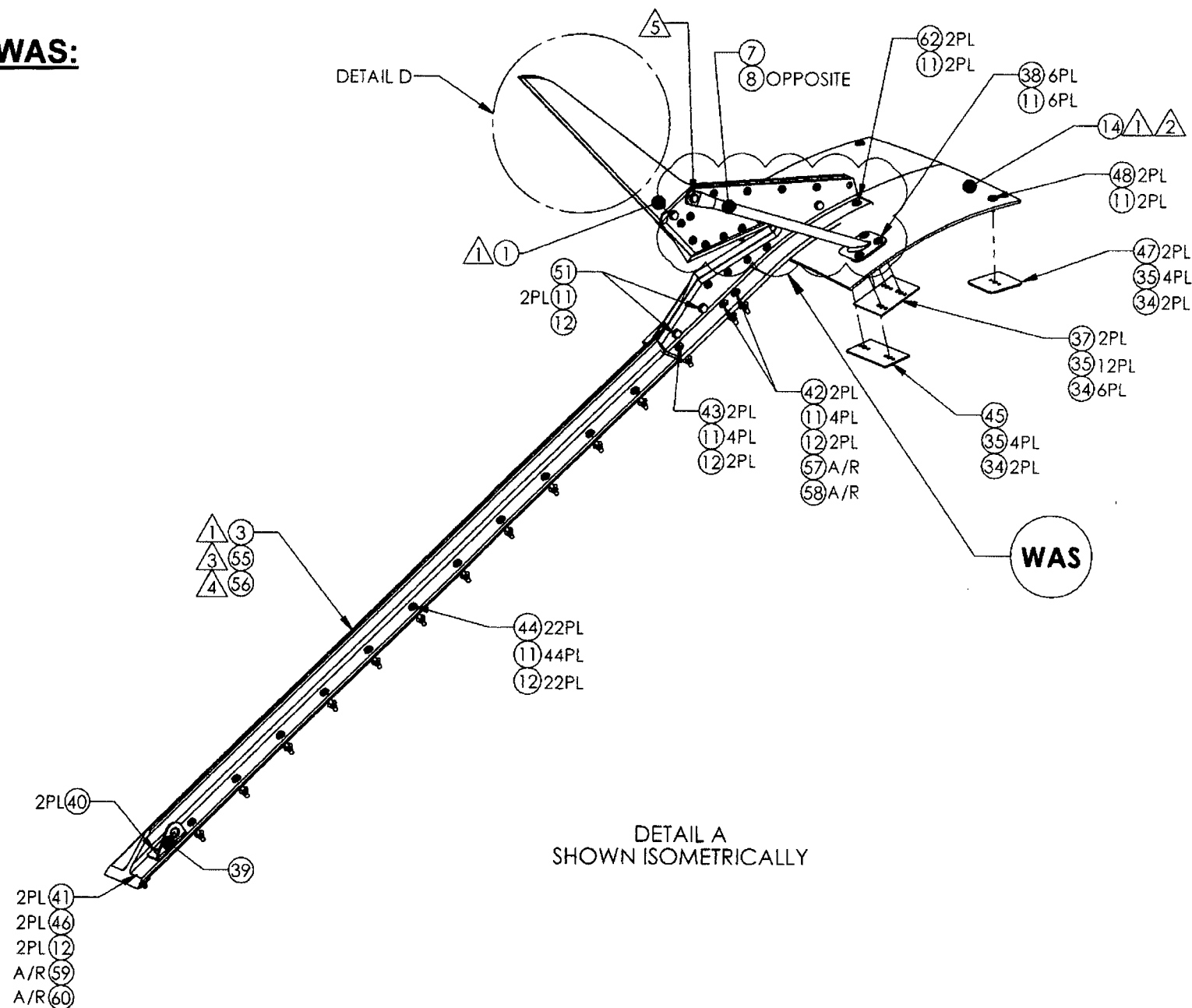
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																					
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																						
Large Fab ☐	Composite ☐	Supplier ☐																																																							
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval																																																					
Description Work Order Deviation			Disposition																																																						
			Completed By																																																						
			Lead hand / Supervisor Approval Verification																																																						
			QC / QA Coordinator Approval																																																						
<table style="width:100%; border: none;"> <tr> <td style="width:25%; text-align: center;">Root Cause</td> <td style="width:25%;"></td> <td style="width:25%; text-align: center;">FAULT CATEGORY</td> <td style="width:25%;"></td> </tr> <tr> <td>Environment ☐</td> <td>No Re-verification ☐</td> <td>Pressure/Forced ☐</td> <td>Temperature/Cure ☐</td> </tr> <tr> <td>Design ☐</td> <td>Operator ☐</td> <td>Bending ☐</td> <td>Set-up ☐</td> </tr> <tr> <td>Doc/Data ☐</td> <td>Offset/Setup ☐</td> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>Supplier ☐</td> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> </tr> <tr> <td>Handling/Pre ☐</td> <td>Training ☐</td> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> </tr> <tr> <td>Material ☐</td> <td>Use for Testing ☐</td> <td>Cuffs ☐</td> <td>Contamination ☐</td> </tr> <tr> <td>Internal Transport ☐</td> <td>Poor Information ☐</td> <td>Crushing ☐</td> <td>Countersink ☐</td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>Rushing ☐</td> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> </tr> <tr> <td>LOA ☐</td> <td>Product Improvement ☐</td> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> </tr> <tr> <td>Substation ☐</td> <td>Process Improvement ☐</td> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>Manufacturing Process ☐</td> <td colspan="2"></td> </tr> <tr> <td>Misidentified ☐</td> <td>Past Due ☐</td> <td colspan="2" style="text-align: center;">OTHER : _____</td> </tr> </table>						Root Cause		FAULT CATEGORY		Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Past Expiry Date ☐	Manufacturing Process ☐			Misidentified ☐	Past Due ☐	OTHER : _____	
Root Cause		FAULT CATEGORY																																																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐																																																						
Design ☐	Operator ☐	Bending ☐	Set-up ☐																																																						
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐																																																						
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐																																																						
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐																																																						
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐																																																						
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐																																																						
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐																																																						
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐																																																						
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐																																																						
Past Expiry Date ☐	Manufacturing Process ☐																																																								
Misidentified ☐	Past Due ☐	OTHER : _____																																																							

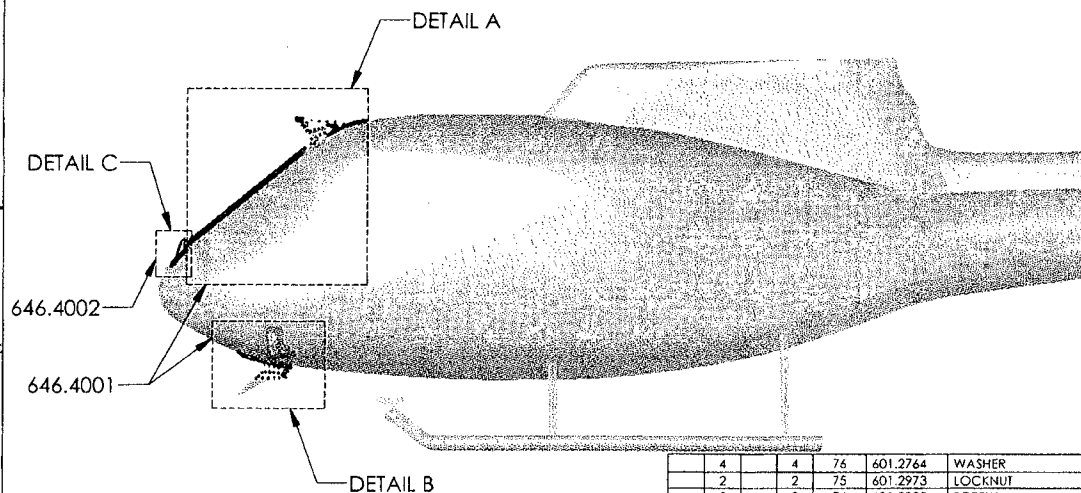
APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 04731				SHEET 1 OF 2		
	DWG NO. 646.4000		REV: A	PREPARED BY J. SOTO		DATE: 11/04/2014	
	DWG TITLE: AS350 CABLE CUTTERS KIT						EFFECT ON DWG ☒ INC. ☐ UNINC.
	APPROVED BY: ENGR		MFG		QC		EFF. NEXT ORDER
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON: REVISED BOM. INCORPORATED ECN 03046 AND 03079.						
76	A	601.2764	4	4	WASHER	NAS1149FN832P	
75	A	601.2973	2	2	LOCKNUT	MS21042-08	
74	A	601.2988	2	2	SCREW	MS27039-0813	
73	A	601.2943	2	2	LOCKNUT	MS21042-3	
72	A	601.3128	2	2	NUT	AN316C4R	
71	A	601.3209	2	2	LOCKNUT	MS21042L4	
70	A	601.2638	4	4	WASHER	NAS1149F0432P	
69	A	601.2669	2	2	BOLT	AN4C7A	
68	A	601.3119	2	2	CLEVIS	AN665-34R	
67	A	601.3121	2	2	EYE BOLT	AN44-57	
66	A	650.9201	2	2	EYE BRACKET ASSY		
51	R	601.2926	10	10	BOLT	AN3-11A	
12	R	601.1624	53	61	LOCKNUT	MS21042L3	
11	R	601.1607	120	138	WASHER	NAS1149F0332P	
8	R	647.7703	2	2	STRUT ASSY		
7	R	647.0112	2	2	STRUT BRACKET		
F/N TC	PART NUMBER	.4003	.4001				
		QTY	DESCRIPTION			MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:					CHANGE CATEGORY		DER REVIEW REQUIRED
☐ MDL ☒ INSTALL INSTRUCTIONS ☒ ICA ☐ FMS ☒ BOM					☐ MAJOR ☒ MINOR		☐ YES ☒ NO

SHEET 2 WAS:

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES:

- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES
- 2 INSTALL F/N 14 WITH F/N 52 & 53
- 3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMaster-CARR P/N 75935A651
- 4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE
VENDOR: R.S. HUGHES P/N 021200-24216
- 5 REUSE FASTENERS FROM F/N 1
- 6 USE WASHERS AS REQUIRED AS SHIMS TO OBTAIN BEST FITMENT
- 7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ONTO F/N 1



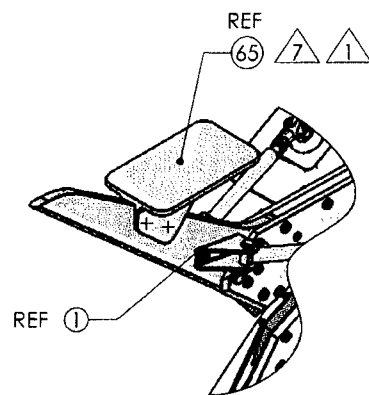
4	4	76	601.2764	WASHER	NAST149F03B32	
2	2	75	601.2973	LOCKNUT	MS21042-08	
2	2	74	601.2988	SCREW	MS27039-0813	
2	2	73	601.2943	LOCKNUT	MS21042-3	
2	2	72	601.3128	NUT	AN316C4R	
2	2	71	601.3209	LOCKNUT	MS21042L4	
4	4	70	601.2638	WASHER	NAST149F0432	
2	2	69	601.2669	BOLT	AN4C7A	
2	2	68	601.3119	CLEVIS	AN4665-34R	
2	2	67	601.3121	EYE BOLT	AN4C4-5A	
2	2	66	650.9201	EYE BRACKET ASSY		
REF	REF	REF	65	647.5701	GPS MOUNT KIT	
			64	601.3151	WASHER	NAST149F03B3P
			63	601.2911	SCREW	MS24494553
2	2	62	601.2637	SCREW	MS27039-1-16	
2	2	61	601.2763	BOLT	AN3-12A	
1	1	60	646.3913	SHIM		
4	4	59	646.3912	SHIM		
1	1	58	646.3911	SHIM		
4	4	57	646.3910	SHIM		
5	5	56	600.1013	PRIMER		
4004	4003	4002	4001	FIND #	PART #	SPEC.

REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ICHS 02199, 02351, 02719 & 02765	02/08/2010	P. BRAYO
B	INCORPORATED ICHS 03046, 03079 & 04031	11/04/2014	P. BRAYO

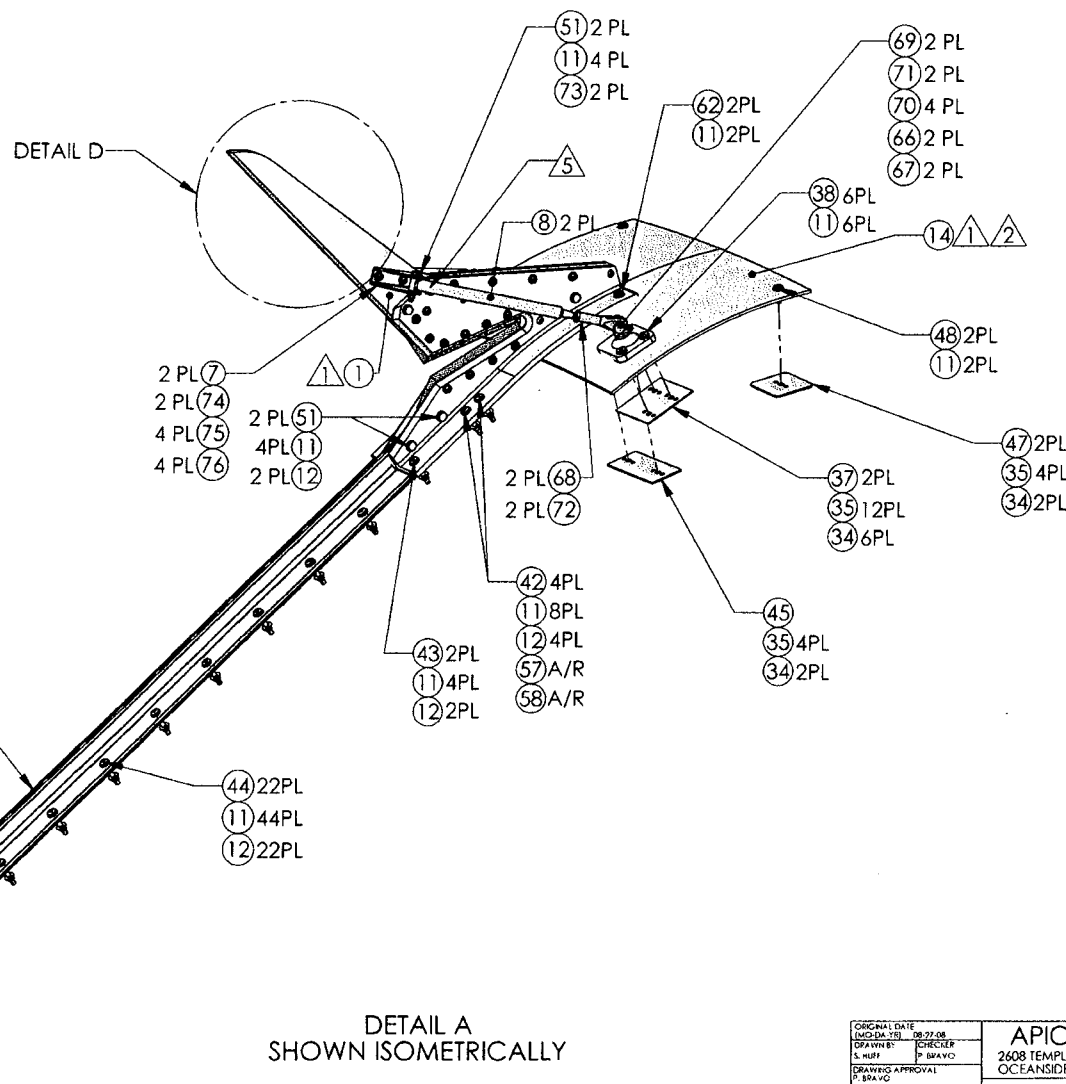
8 FT	8 FT	55	600.0129	VHB TAPE		
1	1	54	600.1012	SEALANT	FR-1425 CLASS B	
1	1	53	600.0991	MAGNABOND 4398 PART B		
1	1	52	600.0990	MAGNABOND 4398 PART A		
10	10	51	601.2826	BOLT	AN3-11A	
2	2	50	646.3814	WIPER BRACKET		
2	2	49	601.2910	SCREW	MS27039-1-18	
2	2	48	601.1365	SCREW	MS27039-1-10	
2	2	47	646.3719	DOUBLER		
2	2	46	646.3718	CUSTOM WASHER		
1	1	45	646.3717	DOUBLER		
22	22	44	601.1948	SCREW	MS27039-1-19	
2	2	43	601.1952	SCREW	MS27039-1-20	
4	4	42	601.1956	SCREW	MS27039-1-21	
2	2	41	601.2829	SCREW	MS24494554	
2	2	40	601.2831	RIVET	MS20426A-D5-7	
1	1	39	646.3716	GAUGE BRACKET		
6	6	38	601.1953	SCREW	MS27039-1-12	
2	2	37	646.3715	STRUT DOUBLER		
2	2	36	601.2824	BOLT	AN3-5A	
36	36	35	601.2277	RIVET	CR294455-3-05	
18	18	34	600.0795	NUTPLATE	MS21047-3	
3	3	33	601.2565	RIVET	MS20470AD5-7	
1	1	32	646.3813	STRUT BRACKET		
4	4	31	601.2822	BOLT	AN3-3A	
2	2	30	646.3812	GUSSET BRACKET		
8	8	29	601.2564	RIVET	MS20470AD5-6	
1	1	28	646.3714	GUSSET		
1	1	27	646.3610	FILLER		
1	1	26	601.2830	SCREW	MS24494555	
2	2	25	601.2825	BOLT	AN3-6A	
1	1	24	646.3811	RADIUS BLOCK		
1	1	23	646.3712	CUP		
1	1	22	646.3711	CLIP		
8	8	21	601.2832	RIVET	MS20470AD5-5.5	
14	14	20	601.2020	RIVET	CR213-5-3	
10	10	19	601.2823	BOLT	AN3-4A	
1	1	18	601.2827	BOLT	AN3-13A	
5	5	17	601.2912	SCREW	MS24494551	
1	1	16	646.3713	GUSSET		
1	1	15	646.3210	SUPPORT		
1	1	14	646.3710	DOUBLER		
1	1	13	646.3110	CHANNEL		
8	53	6	61	601.1624	LOCKNUT	MS21042L3
18	120	16	138	601.1607	WASHER	NAST149F0333P
				646.3410	LH WIPER DEFLECTOR	
				646.3411	RH WIPER DEFLECTOR	
2	2	2	8	647.7703	STRUT ASSY	
2	2	2	7	647.0112	STRUT BRACKET	
1	1	1	6	646.3511	STRUT	
1	1	1	5	646.3510	STRUT	
2	2	2	4	646.3810	BRACKET	
1	1	1	3	646.2910	DEFLECTOR	
1	1	1	2	646.3001	LOWER CUTTER ASSY	
1	1	1	1	646.3301	UPPER CUTTER ASSY	
X	X	X	X	646.4004	FIXED PROVISIONS KIT	
X	X	X	X	646.4003	CABLE CUTTERS KIT WITH CUTTIRES	
X	X	X	X	646.4002	PROBUS	
X	X	X	X	646.4001	AS350 WIPER DEFLECTOR KIT	
X	X	X	X	646.4001	AS350 CABLE CUTTERS KIT	
4004	4003	4002	4001	FIND #	PART #	SPEC.

QTY		ORIGINAL DATE	PARTS LIST	
NEXT ASSY (S)		08-27-08	APICAL INDUSTRIES	
		DRAWN BY: J. HUFF	2608 EMILE HEIGHTS DR.	
		CHECKED: P. BRAYO	OCEANSIDE, CA 92056-3512 (760) 724-5300	
		DESIGNED BY: P. BRAYO	AS350 CABLE CUTTERS KIT	
		DATE: 08-27-08		
		CONTRACT NO.:		
		UNLESS OTHERWISE SPECIFIED		
		ALL DIMENSIONS ARE IN INCHES		
		3 PLACE DECIMALS & 01		
		ANGLES: 1/2		
		SER: B	CAGE CODE: 07M16	REV: B
		SCALE: NONE	DWG. NO.: 646.4000	SHEET: 1 OF 4

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



DETAIL D
TYPICAL GPS MOUNT KIT INSTALLATION

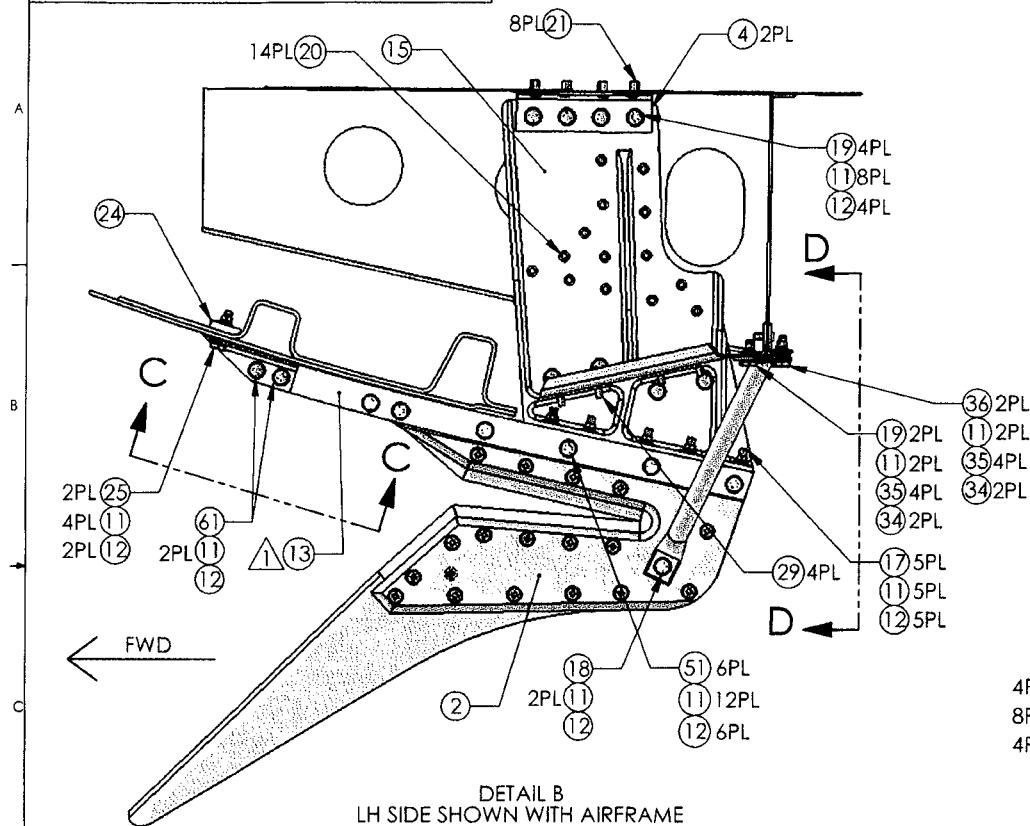


DETAIL A
SHOWN ISOMETRICALLY

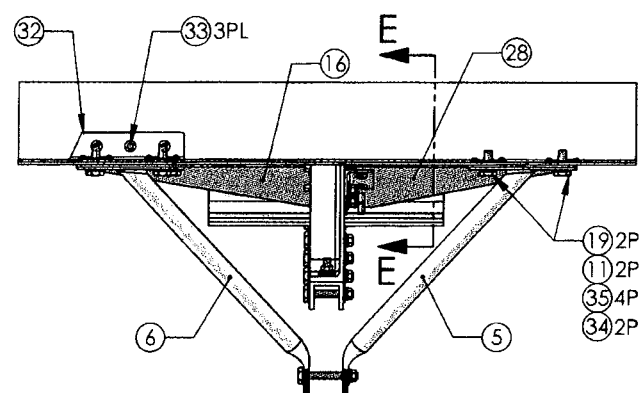
ORIGINAL DATE (MO-DA-YR) 06-07-08	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300		
DRAWN BY: J. HUNT	CHECKER: S. HUNT	P. BRAVO	
DRAWING APPROVAL: P. BRAVO		AS350 CABLE CUTTERS KIT	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES 10 POUNDS ARE 10 LBS 10 POUNDS ARE 10 LBS 10 POUNDS ARE 10 LBS 10 POUNDS ARE 10 LBS		SET CAGE CODE DWG. NO. 8 07/26/08 646.4000	REV. B
		SCALE: NONE	SHEET 2 OF 2

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

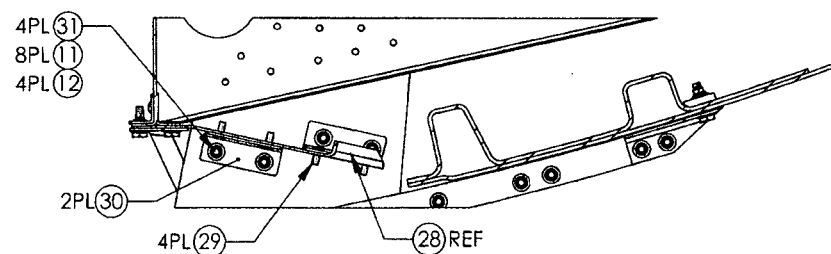
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



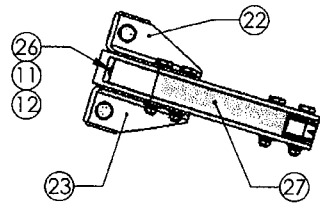
DETAIL B
LH SIDE SHOWN WITH AIRFRAME



SECTION D-D
CUTTER HIDDEN FOR CLARITY



SECTION E-E

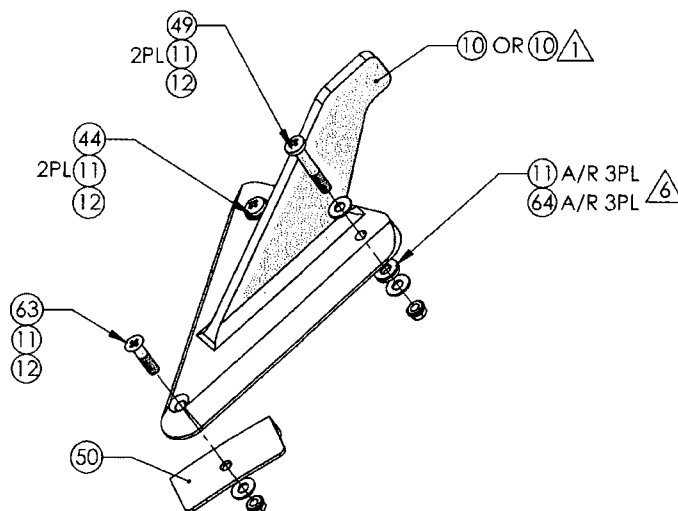


SECTION C-C

ORIGINAL DATE 08-27-08		APICAL INDUSTRIES	
DRAWN BY S. HOFF		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DESIGNED BY P. BRAYCO		AS350 CABLE CUTTERS KIT	
CHECKED BY P. BRAYCO		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°	
REV	DATE	DWG. NO.	REV
B	07/12/16	646.4000	B
SCALE: NONE		SHEET 3 OF 4	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



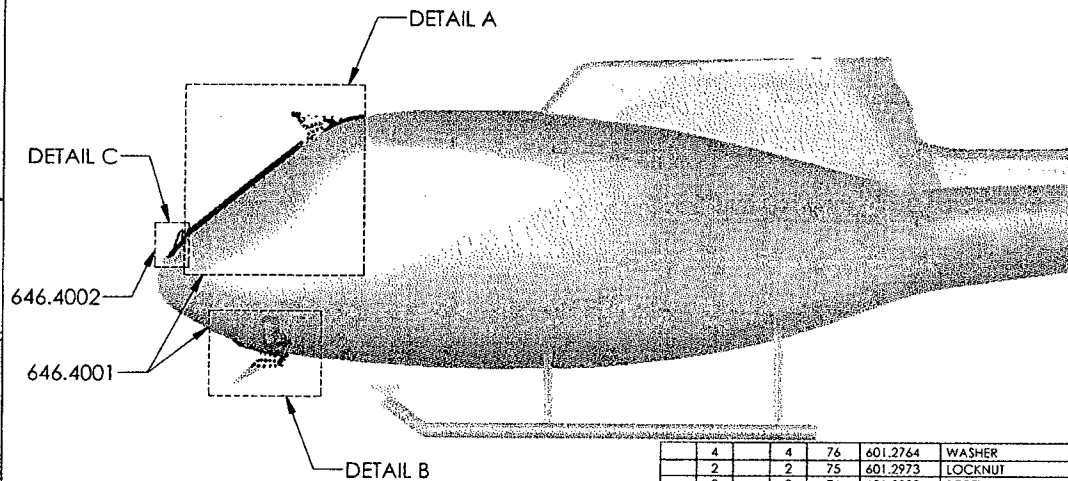
DETAIL C
LH SHOWN EXPLODED
RH OPPOSITE

ORIGINAL DATE UNMODIFIED 09-27-08		APICAL INDUSTRIES	
DRAWN BY: CHLSEY		2608 TEMPLE HEIGHTS DR.	
S. HUFF		OCEANSIDE, CA. 92056-3512 (760)724-5300	
APPROVED BY: P. BRAVO		AS350 CABLE CUTTERS KIT	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET B	REV B
SCALE: NONE		SHEET 4 OF 4	

**DAS
02
9-89**

NOTES:

- ① AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES
- ② INSTALL F/N 14 WITH F/N 52 & 53
- ③ 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMMASTER-CARR P/N 75935A651
- ④ 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE
VENDOR: R.S. HUGHES P/N 021200-24216
- ⑤ REUSE FASTENERS FROM F/N 1
- ⑥ USE WASHERS AS REQUIRED AS SHIMS TO OBTAIN BEST FITMENT
- ⑦ AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ONTO F/N 1

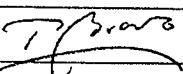
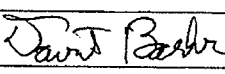
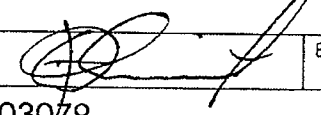


ASME B18.2.1 - 2013 Hex Bolts and Hex Nuts									
	4		4	76	601.2764	WASHER		NAS1149F18B32	
	2		2	75	601.2973	LOCKNUT		MS21042-08	
	2		2	74	601.2988	SCREW		MS27039-0013	
	2		2	73	601.2943	LOCKNUT		MS1049-3	
	2		2	72	601.3128	NUT		AN316C4R	
	2		2	71	601.3209	LOCKNUT		MS1104L2L4	
	4		4	70	601.2638	WASHER		NAS1149FD432	
	2		2	69	601.2649	BOLT		AN4C7A	
	2		2	68	601.3119	CLAVIS		AN665-34R	
	2		2	67	601.3121	EYE BOLT		AN44-5A	
				66	650.9291	GLEF BRACKET ASSY			
				65	647.5701	GPS MOUNT KIT			
REF	REF		REF	64	601.3151	WASHER			
		6		63	601.2911	SCREW		NAS1149F0263P	
		2		62	601.2637	SCREW		MS2469-553	
		2		61	601.2763	BOLT		MS27039-1-16	
		1		60	646.3913	SHIM		AN3-12A	
		4		59	646.3912	SHIM			
		1		58	646.3911	SHIM			
		4		57	646.3910	SHIM			
		5		56	600.1013	PRIMER			
4004	4003	4002L	4001	WIND #	PART #	DESCRIPTION		MATL	SPCF

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECNS 02199, 02351, 02719 & 02765	07/08/2010	P. BRAVO
B	INCORPORATED ECN 03046, 03079 & 04731	11/04/2014	P. BRAVO

B	F	#	B	F	#	S	D	DESCRIPTION	PART #
1	1	1	1	1	54	600.0129	VHB TAPE	SEALANT	PR-1475 CLASS B
1	1	1	1	1	53	600.0991	MAGHOBOND 6398 PART B		
1	1	1	1	1	52	600.0990	MAGHOBOND 6398 PART A		
10			10	1	51	601.2826	BOLT		AN3-11A
			2		50	646.3814	WIPER BRACKET		
			2		49	601.2910	SCREW		MS27039-1-1B
2			2	2	48	601.1365	SCREW		MS27039-1-10
2			2	2	47	646.3719	DOUBLER		
	2		2	2	46	646.3718	CUSTOM WASHER		
1			1	1	45	646.3717	DOUBLER		
22	2	22	22	44	601.1948	SCREW			MS27039-1-19
2			2	43	601.1952	SCREW			MS27039-1-20
4			4	42	601.1956	SCREW			MS27039-1-21
2			2	41	601.2829	SCREW			MS24694554
2			2	40	601.2831	RIVET			MS20426ADS-7
1			1	39	646.3716	GAUGE BRACKET			
6			6	38	601.1953	SCREW			MS27039-1-12
2			2	37	646.3715	STRUT DOUBLER			
	2		2	36	601.2824	BOLT			AN3-5A
36			36	35	601.2277	RIVET			CCR9AAS-3-02
18			18	34	600.0795	NUTPLATE			MS210M7-3
3			3	33	601.2565	RIVET			MS20470ADS-7
1			1	32	646.3813	STRUT BRACKET			
4			4	31	601.2822	BOLT			AN3-3A
2			2	30	646.3812	GUSSET BRACKET			
8			8	29	801.2564	RIVET			MS20470ADS-6
1			1	28	646.3714	GUSSET			
	1		1	27	646.3610	FILLER			
	1		1	26	601.2830	SCREW			MS24694555
	2		2	25	601.2825	BOLT			AN3-6A
	1		1	24	646.3811	RADIUS BLOCK			
	1		1	23	646.3712	CLIP			
	1		1	22	646.3711	CLIP			
8			8	21	601.2832	RIVET			MS20470ADS-5.5
14			14	20	601.2020	RIVET			CR3213-5-3
10			10	19	601.2823	BOLT			AN3-4A
	1		1	18	601.2827	BOLT			AN3-13A
	5		5	17	601.2912	SCREW			MS24694551
1			1	16	646.3713	GUSSET			
1			1	15	646.3210	SUPPORT			
1			1	14	646.3710	DOUBLER			
	1		1	13	646.3110	CHANNEL			
8	53	6	61	12	601.1624	LOCKNUT			MS21042L3
18	120	16	138	11	601.1607	WASHER			NA3114FF0323P
		1		10	646.3410	LH WIPER DEFLECTOR			
				9	646.3411	RH WIPER DEFLECTOR			
	2		2	8	647.7703	STRUT ASSY			
	2		2	7	647.0112	STRUT BRACKET			
	1		1	6	646.3511	STRUT			
	1		1	5	646.3510	STRUT			
2			2	4	646.3810	BRACKET			
	1		1	3	646.2910	DEFLECTOR			
	1		1	2	646.3301	LOWER CUTTER ASSY			
	1		1	1	646.3301	UPPER CUTTER ASSY			
X					646.4004	FRED PROVISIONS KIT			
	X				646.4003	CABLE CUTTERS KIT WITH NO.1750			
		X			646.4002	ASSIC WIPER DEFLECTOR KIT			
			X		646.4001	ASS300 CABLE CUTTERS KIT			
4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	AAATY	SPEC	

[illegible]

APICAL INDUSTRIES, INC.		ENGINEERING CHANGE NOTICE NO. 04731				SHEET 1 OF 2		
		DWG NO. 646.4000		REV: A	PREPARED BY J. SOTO	DATE: 11/04/2014		EFFECT ON DWG ☒ INC. ☐ UNINC.
		DWG TITLE: AS350 CABLE CUTTERS KIT						
		APPROVED BY: ENGR 		MFG 	QC 	EFF. NEXT ORDER		
TRANSACTION CODES (TC): A-ADD R-REVISE C-CREATE D-DELETE		REASON: REVISED BOM. INCORPORATED ECN 03046 AND 03079.						
76	A	601.2764	4	4	WASHER	NAS1149FN832P		
75	A	601.2973	2	2	LOCKNUT	MS21042-08		
74	A	601.2988	2	2	SCREW	MS27039-0813		
73	A	601.2943	2	2	LOCKNUT	MS21042-3		
72	A	601.3128	2	2	NUT	AN316C4R		
71	A	601.3209	2	2	LOCKNUT	MS21042L4		
70	A	601.2638	4	4	WASHER	NAS1149F0432P		
69	A	601.2669	2	2	BOLT	AN4C7A		
68	A	601.3119	2	2	CLEVIS	AN665-34R		
67	A	601.3121	2	2	EYE BOLT	AN44-57		
66	A	650.9201	2	2	EYE BRACKET ASSY			
51	R	601.2926	10	10	BOLT	AN3-11A		
12	R	601.1624	53	61	LOCKNUT	MS21042L3		
11	R	601.1607	120	138	WASHER	NAS1149F0332P		
8	R	647.7703	2	2	STRUT ASSY			
7	R	647.0112	2	2	STRUT BRACKET			
F/N/TC	PART NUMBER	.4003	.4001					
		QTY	DESCRIPTION			MATERIAL	SPECIFICATION	
DOCUMENTS EFFECTED:					CHANGE CATEGORY			
☐ MDL ☒ INSTALL INSTRUCTIONS ☒ ICA ☐ FMS ☒ BOM					☐ MAJOR ☒ MINOR ☐ YES ☒ NO			

Work Order ID 135151

Thursday, July 30, 2015 1:39:05 PM

135151

Page 1

Item ID: 646.4001

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AS350 Cable Cutter System

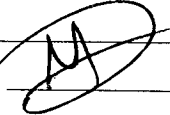
Start Date: 7/30/15 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 8/03/15 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: 

Date: 15-7-30

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
646.4000	B								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP 646.4001								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									

Ship Aug 3

SH 2015/7/30

① JA JUL 30 2015